

REMARKS/ARGUMENTS

Claims 1-18 and 20-42 are currently pending in this application. Claims 1, 21 and 29 have been amended herein.

Claims 1-2, 7-10, 12, 14, 21-25, 27-35 and 37 have been rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,988,971 to Fossey ("Fossey"). Claims 3-4 and 39-40 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Fossey in view of U.S. Patent No. 6,024,393 to Shamlou et al. ("Shamlou"). Claims 5-6 and 41-42 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Fossey. Claims 11, 13, 15-16 and 36 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Fossey in view of U.S. Patent No. 6,454,332 to Govzman et al. ("Govzman"). Claims 17-18, 20 & 26 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Fossey in view of U.S. Patent No. 6,164,894 to Cheng ("Cheng"). Claim 38 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Fossey in view of U.S. Patent No. 6,040,585 to Hsiao ("Hsiao").

Response to Rejections

The Examiner has rejected independent claims 1, 21, 23 and 29 under 35 U.S.C. § 102(b) as being anticipated by Fossey. Anticipation under 35 U.S.C. § 102 requires each and every limitation of the claim to be disclosed in a single prior art reference, either expressly or inherently. The anticipating reference must disclose the elements in the arrangement called for by the claim. If any limitation of the claim is missing, the reference does not anticipate.

Applicant respectfully traverses the rejection and submits that independent claims 1, 21, 23 and 29 are patentable over Fossey because Fossey, either alone or in combination with any of the other references cited, does not show or suggest a mapping sensor as recited in the claims.

Claims 1, 21 and 29 have been amended. As currently amended independent claims include a mapping sensor configured to determine the position and orientation of the substrate within the carrier from at least two angles with respect to the critical plane. None of the cited references, either alone or in combination with any other cited reference, disclose a mapping sensor or mapping operation that includes determining the position and orientation of a substrate within a carrier from at least two angles with respect to the critical plane.

In response to Applicant's previous response, the Examiner states that the structure Applicant has relied upon to differentiate the cited references from the claimed invention, i.e., the structure found in paragraphs 0061-0062 of the specification, is not recited in the claims. The Examiner admits the structure disclosed in paragraphs 0061-0062 is not contained in the prior art stating, "It is not the Examiner's position that the cited prior [sic] discloses the structure argued by the Applicant." Indeed, the structure disclosed in paragraph 0061-0062, and currently claimed, is not disclosed in the cited references. Applicant submits claims 1, 21, and 29, as amended, include additional structure not found in the cited references. Therefore claims 1, 21 and 29 are patentably distinct and are in condition for allowance.

Regarding claim 23, Applicant respectfully submits that as previously recited, claim 23 is patentably distinct and in condition for allowance. Claim 23 recites steps included in paragraphs 0061-0062 of Applicant's specification, including generating a pick table including mean vertical substrate location data, and sequentially indexing the robotic arm according to the mean vertical

substrate locations of the pick table. None of the cited references disclose the generation of a pick table including mean vertical location data and sequentially indexing a robotic arm according to the mean vertical location data of the pick table. In fact, in rejecting claim 23, the Examiner only cites specific portions of Fossey for the processor and distance measuring features of Fossey. See September 28, 2007 Office Action, page 3. There is no citation to any disclosure in the cited references of a pick table including mean vertical substrate location data or sequentially indexing the robotic arm according to the mean vertical data substrate locations of the pick table. Independent claim 23 is not anticipated by Fossey because Fossey does not disclose, and the Office action fails to identify, each and every element as arranged in the claim. Applicant respectfully submits that claim 23 is patentably distinct from Fossey and therefore is in condition for allowance.

Applicant asserts that independent claims 1, 21, 23 and 29 are in condition for allowance and respectfully requests favorable action in the form of a Notice of Allowance. Claims 2-18, 20, 22, 24-28 and 30-42, which depend from patentable independent claims, are also in condition for allowance.

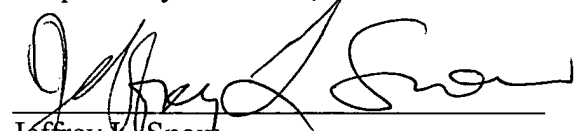
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CONCLUSION

For at least the reasons outlined above, Applicant submits that this application is in condition for allowance and requests favorable action in the form of a Notice of Allowance.

Please apply any charges or credits to Deposit Account No. 50-1721.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Jeffrey L. Snow", is written over a horizontal line.

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